

REMARKS

This Reply is in response to the Office Action mailed on June 17, 2005 in which Claims 1-22 were rejected. With this response, Claims 6 and 16-20 are cancelled; Claims 1-5, 7, 9-14 and Claims 21-22 are amended; and Claims 23-27 are added. Claims 1-5, 7-15 and 21-27 are presented for reconsideration and allowance.

I. Examiner Interview Summary.

On September 14 and September 16, 2005, a telephonic interview was held between Examiner Morrison and Applicant's attorney, Todd A. Rathe. The rejections of the claims under 35 U.S.C. § 112, second paragraph were discussed. It was agreed upon that Claims 1-3, 11 and 15, as amended above, overcome the rejections under 35 U.S.C. § 112. In addition, the amendments to the claims addressing the prior art rejections were summarized for Examiner Morrison with the understanding that Examiner Morrison would review such amendments in greater detail upon receiving this response.

Applicant wishes to thank Examiner Morrison for the opportunity to discuss the rejections and for Examiner Morrison's suggestions for amending the claims to overcome the prior art of record.

II. Rejection of Claims 1-15 and 20-22 Under 35 U.S.C. § 112, Second Paragraph.

Paragraph 1 of the Office Action rejected Claims 1-15 and 20-22 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinct claim the subject matter of the invention. The rejections under 35 U.S.C. § 112, second paragraph, are generally based upon either an asserted lack of antecedent basis for one or more limitations in such claims or based upon an asserted "insufficient structural relationship" recited in the claims.

A. Insufficient Antecedent Basis.

With respect to Claim 2, the Office Action asserted that the limitation "the media output tray" lacks antecedent basis. Claim 2 is amended to delete this limitation, rendering the rejection moot.

With respect to Claim 4, the Office Action asserted that the limitation "the storage position" lacks antecedent basis. Claim 4 is amended to alternatively recite the second positions. Claim 1 recites an input tray that may be in a second position and an output tray that may be in a second position. Thus, Claim 1 provides antecedent basis for the recited second positions in Claim 4.

With respect to Claim 10, the Office Action asserted that the limitation "the plane" lacks antecedent basis. Claim 10 is amended to replace "the plane" with --a plane--.

With respect to Claim 12, the Office Action asserted that the limitation "the input tray" lacks antecedent basis. Also with respect to Claim 12, the Office Action asserted that "the output tray plane" lacks antecedent basis. Applicant respectfully notes that Claim 12 does indeed provide antecedent basis for such limitations. In particular, Claim 12 specifically recites that "wherein the input tray defines an input tray plane and the output tray defines an output tray plane". Accordingly, Applicants respectfully request that the rejection of Claim 12 under 35 U.S.C. § 112 for lack of antecedent basis for such terms be withdrawn.

With respect to Claim 14, the Office Action asserted that the limitation "the same distance" lacks antecedent basis. With respect to Claim 14, the Office Action also asserted that it was unclear which media processing position and which storage position are being claimed based on the two different processing positions and two different storage positions set forth in Claim 11. In response, Claim 14 is amended to recite that the edge is spaced apart from the input tray by a distance when the output tray is in its media processing position and is spaced apart from the input tray by the distance when the output tray is in its storage position.

With respect to Claim 15, the Office Action asserted that the limitation "the device" lacks antecedent basis. Claim 15, line 2 is amended to recite the hard copy device which has antecedent basis in Claim 11.

With respect to Claim 20, the Office Action asserted that the limitation "the same distance" lacks antecedent basis. With this response, Claim 20 is cancelled, rendering the rejection moot.

With respect to Claim 22, the Office Action asserted that the limitation "the first and second pivot axes" lack antecedent basis. Claim 22 is amended to delete this limitation, rendering the rejection moot.

B. Insufficient Structural Relationship.

The Office Action asserted that Claims 1, 5-7, 12, 13, 21 and 22 have "insufficient structural relationship" to understand how the claim limitations are achieved. In response, Claim 6 is cancelled and each of Claims 1, 7, 12, 13, 21 and 22 are amended to recite that such structures are configured to achieve the claimed function. Claim 5 is amended to recite that the input tray and output tray are operably coupled to one another during movement of the input tray from the first position to the second position which cause movement of the output tray from the first position to the second position. Applicant respectfully notes that the functional claim limitations are permitted as set forth in M.P.E.P. 2173.05(g). Accordingly, Claims 1, 5, 7, 12, 13, 21 and 22, as amended, overcome the rejection under 35 U.S.C. § 112, second paragraph, on the basis of "insufficient structural relationship".

C. Other Miscellaneous Basis for Rejection Under 35 U.S.C. § 112, Second Paragraph.

With respect to Claim 4, the Office Action asserted that it is unclear what is meant by the recited "without independent securement". Claim 4 is amended to recite that the input tray extends on a first side of a vertical plane containing the first axis in the first position and on a second side of the vertical plane in the second position such that the input and output trays are maintained in the second positions

without independent securement. In other words, gravity assists in maintaining such trays in their second positions.

With respect to Claims 11 and 12, the Office Action asserted that it is unclear which recited storage position is being referred to. Claims 11 and 12 are each amended to replace the storage position with --their storage positions--. The limitation "their storage positions" obviously refers to the storage positions of the input tray and the output tray.

With respect to Claim 21, the Office Action asserted that it is unclear whether (1) the trap door pivots via the movement of the output tray or (2) the trap door can pivot when the output tray moves to the second position." Applicant respectfully notes that it is both. The trap door pivots as a result of movement of the output tray and the trap door pivots as a result of the movement of the output tray to its second position.

Based upon the aforementioned amendments and the above clarifying remarks, Applicant respectfully requests that the rejection of Claims 1-15 and 20-22 under 35 U.S.C. § 112, second paragraph, be withdrawn.

III. Rejection of Claims 1-6, 11-13 and 15 Under 35 U.S.C. § 102(b) Based Upon Japanese Publication No. 5-77507.

Paragraph 2 of the Office Action rejected Claims 1-6, 11-13 and 15 under 35 U.S.C. § 102(b) as being anticipated by Japanese Publication No. 5-77507. Claim 6 is cancelled. Claims 1-6, 11-13 and 15, as amended, overcome the rejection based upon Japanese '507.

A. Claim 1.

Claim 1, as amended, recites an input tray including a movable media guide that is configured to pivot about a first axis between a first position and a second position. In particular, Claim 1 further recites an output tray configured to pivot about a second axis between a first position and a second position, wherein the output tray

includes an opening configured to receive the guide when the input tray and the output tray are in the second positions. Figure 8 of the present application clearly illustrates an opening 48 which receives a guide 42 when the input tray 12 and the output tray 14 are in the second positions. Accordingly, no new matter is added.

Japanese '507 fails to disclose an input tray having a movable media guide and an output tray having an opening that is configured to receive the media guide when the input tray and the output tray are in the second positions. In fact, Japanese '507 fails to disclose either a movable media guide or an opening that receives the media guide. Thus, Claim 1, as amended, overcomes the rejection based upon Japanese '507. Claims 2-6 depend from Claim 1 and overcome the rejection for the same reasons.

B. Claim 11.

Claim 11, as amended, recites a hardcopy device which includes an input tray pivotally movable about a first axis between a processing position so as to direct media into a horizontally facing front of the device and an output tray pivotally movable about a second pivot axis between a processing position so as to receive media discharged from the front of the device and a storage position.

Japanese '507 fails to disclose an input tray that pivots about an axis between a processing position so as to direct media into a horizontally facing front of a device and an output tray that is pivotal about an axis between a processing position so as to receive media discharged from the front of the device. In contrast, Japanese '507 merely discloses trays 8 and 24 which extend or project from a top, not a front of the device. Because such trays extend from a top rather than a front of the device, the overall height and space requirements above such device for accommodating the trays are increased. Accordingly, Claim 11, as amended, overcomes the rejection based upon Japanese '507. Claims 12-13 and 15 depend from Claim 11 and overcome the rejection for the same reasons.

IV. Rejection of Claims 1-4, 7, 11 and 15 Under 35 U.S.C. § 102(e) Based Upon the Katsuyama Publication.

Paragraph 3 of the Office Action rejected Claims 1-4, 7, 11 and 15 under 35 U.S.C. § 102(e) as being anticipated by Katsuyama, U.S. Patent Publication No. 20030052956. Claims 1-4, 7, 11 and 15, as amended, overcome the rejection based upon Katsuyama.

A. Claim 1.

Claim 1, as amended, recites an input tray including a movable media guide that is configured to pivot about a first axis between a first position and a second position. In particular, Claim 1 further recites an output tray configured to pivot about a second axis between a first position and a second position, wherein the output tray includes an opening configured to receive the guide when the input tray and the output tray are in the second positions. Figure 8 of the present application clearly illustrates an opening 48 which receives a guide 42 when the input tray 12 and the output tray 14 are in the second positions. Accordingly, no new matter is added.

fails to disclose an input tray having a movable media guide and an output tray having an opening that is configured to receive the media guide when the input tray and the output tray are in the second positions. In fact, Katsuyama fails to disclose either a movable media guide or an opening that receives the media guide. Thus, Claim 1, as amended, overcomes the rejection based upon Katsuyama. Claims 2-6 depend from Claim 1 and overcome the rejection for the same reasons.

B. Claim 11.

Claim 11, as amended, recites a hardcopy device that includes an input tray pivotally movable about a first axis between a processing position and a storage position and an output tray pivotally movable about a second axis between a processing position and a storage position. Claim 11 further recites that the terminal end of the input tray extends as a first side of a vertical plane containing the first axis when in the processing position and on a second side of the vertical plane in the

storage position. One example of such an arrangement is clearly shown in Figure 4 of the present application. As a result, the input tray and the output tray may be maintained in their storage positions with the assistance of gravity.

Katsuyama fails to disclose or suggest an input tray and an output tray which are pivotable about distinct axes and wherein a terminal end of the input tray extends on a first side of a vertical plane containing the first axis in the processing position and on a second side of the vertical plane in the storage position. In contrast, the terminal end of tray 20 (characterized by the Office Action as the input tray) extends on the same side of a vertical plane passing through axis 21 of tray 20 in both the raised position (shown in Figure 3) and the lower position (shown in Figure 2). As a result, Katsuyama requires mechanisms for holding such trays in the closed position such as locking mechanism 41 described in column 7 of Katsuyama. Thus, Claim 11, as amended, overcomes the rejection based upon Katsuyama. Claim 15 depends from Claim 11 and overcomes the rejection for the same reasons.

V. Rejection of Claims 10, 14 and 16-20 Under 35 U.S.C. § 103 Based Upon Japanese '507.

Paragraph 4 of the Office Action rejected Claims 10, 14 and 16-20 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 5-77507. Claims 10 and 14 depend from Claims 1 and 11, respectively, and overcome the rejection for the same reasons discussed above with respect to Claims 1 and 11. Claims 16-20 are cancelled.

VI. Rejection of Claims 8 and 9 Under U.S.C. § 103(a) Based Upon the Katsuyama Publication and Morinaga.

Paragraph 5 of the Office Action rejected Claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Katsuyama, U.S. Patent Publication No. 20030052956 and further in view of Morinaga et al., U.S. Patent No. 6,113,093. Claims 8 and 9 depend from Claim 1 and overcome the rejection for the same reasons discussed above with respect to Claim 1.

Moreover, Claims 8 and 9 are further patentably distinct over the hypothetical combination of Katsuyama and Morinaga for the following additional reasons.

Claim 8 recites the device further includes a trap door pivotally connected to the output tray such that when the output tray is in the second position, the trap door lies in a plane that is not parallel to the plane of the output tray. Claim 9 recites the output tray and the trap door are coplanar when the output tray is in the first position.

The Office Action acknowledges that Katsuyama fails to disclose a trap door pivotally connected to the output tray. As a result, the Office Action attempts to additionally rely upon Morinaga and asserts that it would be obvious to pivotally connect the trap door structure of Katsuyama to the output tray 23 of Katsuyama as taught by Morinaga. However, neither Katsuyama nor Morinaga disclose a trap door pivotally connected to an output tray. Rather, Katsuyama merely discloses a sub-tray 27 slidable with respect to a main tray 26. Morinaga merely discloses a document auxiliary tray 33 pivotally connected to a document setting tray 31. Neither tray 31 nor tray 33 of Morinaga are part of an output tray. In contrast, both trays 31 and 33 are part of an input tray for supplying media to a sensor that reads image data from documents.

Even assuming, arguendo, that it would be obvious to modify Katsuyama based upon Morinaga, the resulting hypothetical combination, at best, would merely include an auxiliary tray connected to sheet feed tray 20 (the i.e., input tray) of Katsuyama, not main tray 26. Thus, the rejection of Claims 8 and 9 based upon Katsuyama in view of Morinaga are improper and should be withdrawn.

VII. Rejection of Claims 21 and 22 Under 35 U.S.C. § 103(a) Based Upon the Katsuyama Publication and Morinaga.

Paragraph 6 of the Office Action rejected Claims 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Katsuyama, U.S. Patent Publication No. 20030052956 in view of Morinaga et al., U.S. Patent No. 6,113,093. Claims 21 and

22, as amended, overcome the rejection based upon Katsuyama in view of Morinaga.

A. Claim 21.

Claim 21, as amended, recites a hard copy device including an internal media path through the device, an input tray configured to pivot about a first axis between a first position for directing media to the path and a second position, and an output tray above the input tray and configured to receive media discharged from the device. The output tray includes a first portion having a terminal end configured to pivot about a second axis between a first position and a second position and a second portion extending from the first portion towards the path and pivotally connected to the first portion such that the second portion pivots relative to the first portion when the first portion is moved to the second position.

Neither Katsuyama nor Morinaga, alone or in combination, disclose or suggest an output tray above an input tray having a first portion that pivots between a first position and a second position and a second portion extending from the first portion towards the path and pivotally connected to the first portion such that the second portion pivots relative to the first portion. As acknowledged by the Office Action, Katsuyama fails to disclose an output tray having a second portion or trap door pivotally connected to a first portion of the output tray. As a result, the Office Action attempts to additionally rely upon Morinaga and asserts that it would be obvious to pivotally connect a second portion to the output tray of Katsuyama based upon the teachings of Morinaga.

However, the assertion that it would somehow be obvious to modify Katsuyama based upon the teachings of Morinaga and that the resulting hypothetical combination would result in the recited structure of Claim 21 is erroneous for several reasons. First, Morinaga does not disclose an output tray having a first pivotal portion and a second portion pivotally connected to the first portion. In contrast, Morinaga merely discloses trays 31 and 33 which serve as input, not output trays. Second, auxiliary tray 33 (characterized as the trap door by the Office Action) does not extend from tray 31 towards an internal media path. Third, even assuming, arguendo, that it would be obvious to modify Katsuyama based on Morinaga, the resulting combination would at best merely include an

auxiliary tray 33 pivotally connected to sheet feed tray 20, not to main tray 26. Any assertions to the contrary would appear to be based upon impermissible hindsight reasoning using Applicant's own disclosure as a blueprint. Accordingly, Claim 21, as amended, overcomes the rejection based upon Katsuyama and Morinaga.

B. Claim 22.

Claim 22, as amended, recites a hardcopy device that includes an input tray pivotally movable about a first axis and an output tray. The output tray includes a first portion pivotally movable about a second axis and a second portion pivotally connected to the first portion about a third axis that is parallel to and between the first and second axes.

Neither Katsuyama nor Morinaga, alone or in combination, disclose an input tray that pivots about a first axis, an output tray having a first portion that pivots about a second axis and a second portion pivotally connected to the first portion about a third axis that is parallel to and between the first and second axes. The Office Action acknowledges that Katsuyama fails to disclose a trap door or second portion that is pivotally connected to a first portion. As a result, the Office Action attempts to additionally rely upon Morinaga. However, the Office Action apparently also acknowledges that Morinaga fails to the relative locations of the axes. In an attempt to satisfy this acknowledged deficiency in Katsuyama and Morinaga, the Office Action states that:

With regard to the location of the third axis between the first and second axes, it is noted that providing a third axis in a convenient location is merely a matter of design choice, absent a showing of criticality for such third axis location.

Applicant respectfully notes that the location of the third axis between the first and second axis does provide a beneficial function. The location of the third axis is not merely a matter of design choice. Because the third axis about which the second portion is pivotally connected to the first portion of the output tray is between the first axis about which the input tray pivots and the second axis about which the

output tray pivots, the second portion pivots away from the input tray as the output tray is pivoted towards the storage position. As set forth on page 10, lines 5-7 of the present application, "Because the rearward edge 61 rotates upwardly away from the input tray 12, a user's view of and access to the input tray 12 is unhindered by any part of the output tray." Because the recited claim limitation is not merely a matter of design choice and because the Office Action has failed to establish a prima facie case of obviousness as to how the hypothetical combination of Katsuyama and Morinaga meet such claim limitation, Claim 22, as amended, overcomes the rejection based upon Katsuyama and Morinaga.

VIII. Added Claims.

With this response, Claims 23-27 are added. Claims 23-27 are patentably distinct over the prior art of record.

Added Claim 23 recites a tray assembly which includes a forward end configured to be removably received within a front face opening of a device, an input tray configured to direct a medium into the front face opening of the device and an output tray configured to receive a medium discharged from the front face opening of the device, wherein the input tray and the output tray are configured to pivot between storage positions and processing positions and wherein the input tray and the output tray extend substantially parallel to one another in the storage positions.

The prior art of record fails to disclose the recited tray assembly. For example, Katsuyama, U.S. Patent Publication No. 20030052956, and Japanese Publication No. 5-77507 merely disclose trays that are pivotally connected to the main printer housing. Neither Katsuyama nor Japanese '507 disclose a tray assembly having a forward end configured to be removably received within a front face opening of a device. Moreover, to modify Katsuyama or to modify Japanese Publication No. 5-77507 such that trays will be provided as part of a tray assembly would require a complete restructuring of such printing devices and would appear to necessitate reliance on Applicant's own disclosure as a blueprint. Accordingly, added Claim 23 is believed to be patentably distinct over the prior art of record.

Claim 24 depends from Claim 23 and further recites that the terminal end of the input tray extends on a first side of a vertical plane containing the first axis in the processing position and on a second side of the vertical plane in the storage position. As noted above with respect to Claim 11, neither Katsuyama nor Japanese '507 disclose such an arrangement.

Claim 25 depends from Claim 23 and further recites that the output tray includes a first portion pivotally coupled to the forward end and a second portion pivotally coupled to the first portion and configured to extend from the first portion towards the front face opening.

The prior art of record fails to disclose an output tray having a first portion pivotally coupled to a forward end of a tray assembly and a second portion pivotally coupled to the first portion and configured to extend from the first portion towards a front face opening of a device. For example, Katsuyama fails to disclose an output tray including two pivotally connected portions. Morinaga fails to satisfy this deficiency in that Morinaga merely discloses two tray portions of an input tray, not an output tray, that are pivotally connected to one another.

Claim 26 depends from Claim 25 and further recites that the output tray extends above the input tray in the processing position and that the second portion of the output tray is configured to tilt upwardly away from the input tray during pivoting of the first portion from the processing position towards the storage position. The prior art of record fails to disclose the limitations of Claim 26.

Claim 27 depends from Claim 26 and further recites that the second portion is configured to slide towards the forward end during pivoting of the first portion from the processing position towards the storage position. The prior art of record fails to disclose an output tray having two portions, wherein one of the portions tilts upwardly away from the input tray during pivoting of the first portion from a processing position towards a storage position and that the second portion further slides towards the forward end during pivoting of the first portion from the processing

position towards the storage position. Accordingly, added Claims 23-27 are presented for consideration and allowance.

IX. Conclusion.

After amending the claims as set forth above, Claims 1-5, 7-15 and 21-27 are now pending in this application.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 08-2025. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 08-2025. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 08-2025.

Respectfully submitted,

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